

**In the Claims:**

Please amend claims 2-4, 8, 9, 12-14, 15 and 33-42. Claims 1, 5-7, 10-11, 15, 17, 21-24, 26, 27 and 31 are canceled. Please add new claims 43 and 44. The claims are as follows:

1. (Canceled)

2. (Currently Amended) The integrated circuit device of claim 33, further comprising a second circuit coupled to an output of said second latch and powered from said second rail.

3. (Currently Amended) The integrated circuit device of claim 33, wherein said first clock signal is supplied from a first clock and said second clock signal is supplied from a second clock, said first and second clocks powered from a third power rail, said third power rail supplied from a third power supply.

4. (Currently Amended) The integrated circuit device of claim 33, wherein:

said first power rail is powered before said first clock signal goes high and is de-powered after said first clock signal goes low; and

said second power rail is powered before said second clock signal goes high and is de-powered after second first clock signal goes low.

5-7 (Canceled)

8. (Currently Amended) The integrated circuit device of claim 34, wherein said first clock signal is supplied from a first clock and said second clock signal is supplied from a second clock, said first and second clocks powered from a third power rail, said third power rail supplied from a third power supply.

9. (Currently Amended) The integrated circuit device of claim 34, wherein:

said first power rail is powered before said first clock signal goes high and is de-powered after said first clock signal goes low; and

said second power rail is powered before said second clock signal goes high and is de-powered after second first clock signal goes low.

10-11 (Canceled)

12. (Currently Amended) The integrated circuit device of claim 35, further comprising a fifth latch powered from said first power rail, said fourth circuit coupled to an input of said fifth latch.

13. (Currently Amended) The integrated circuit device of claim 35, wherein said first clock signal is supplied from a first clock, said second clock signal is supplied from a second clock, said third clock signal is supplied from a third clock and said fourth clock signal is supplied from a fourth clock, said first, second, third and fourth clocks powered from a fifth power rail, said fifth power rail supplied from a fifth power supply.

14. (Currently Amended) The integrated circuit device of claim 35, wherein:

said first power rail is powered before said first clock signal goes high and is de-powered after said first clock signal goes low;

said second power rail is powered before said second clock signal goes high and is de-powered after second first clock signal goes low;

said third power rail is powered before said third clock signal goes high and is de-powered after said third clock signal goes low; and

said fourth power rail is powered before said fourth clock signal goes high and is de-powered after second first clock signal goes low.

15. (Canceled)

16. (Previously Presented) The integrated circuit of claim 35, wherein said second clock phase goes high when said first clock phase goes low, said third clock phase goes high when said second clock phase goes low, said fourth clock phase goes high when said third clock phase goes low and said first clock phase goes high when said fourth clock phase goes low.

17. (Canceled)

18. (Previously Presented) The method of claim 36, further comprising a second circuit coupled to an output of said second latch and powered from said second rail.

19. (Previously Presented) The method of claim 36, wherein:

said first clock signal is supplied from a first clock and said second clock signal is supplied from a second clock; and

powering said first and second clocks from a third power rail, said third power rail supplied from a third power supply.

20. (Previously Presented) The method of claim 36, further including:

powering said first power rail before said first clock signal goes high and de-powering said first power rail after said first clock signal goes low; and

powering said second power rail before said second clock signal goes high and de-powering said second power rail after second clock goes low.

21-24. (Canceled)

25. (Previously Presented) The method of claim 37, further including:

powering said first power rail before said first clock signal goes high and de-powering said first power rail after said first clock signal goes low; and

powering said second power rail before said second clock signal goes high and de-powering said second power rail after second first clock signal goes low.

26-27 (Canceled)

28. (Previously Presented) The method of claim 38, said integrated circuit further comprising a fifth latch powered from said first power rail, said fourth circuit coupled to an input of said fifth latch.

29. (Previously Presented) The method of claim 38, wherein:

said first clock signal is supplied from a first clock, said second clock signal is supplied from a second clock, said third clock signal is supplied from a third clock and said fourth clock signal is supplied from a fourth clock; and

powering said first, second, third and fourth clocks from a fifth power rail, said fifth power rail supplied from a fifth power supply.

30. (Previously Presented) The method of claim 38, further including:

powering said first power rail before said first clock signal goes high and de-powering said first power rail after said first clock signal goes low;

powering said second power rail before said first clock signal goes high and de-powering said second power rail after said first clock signal goes low;

powering said third power rail before said first clock signal goes high and de-powering said third power rail after said first clock signal goes low; and

powering said fourth power rail before said first clock signal goes high and de-powering said fourth power rail after said first clock signal goes low.

31 (Canceled)

32. (Previously Presented) The method of claim 38, wherein said second clock signal goes high when said first clock signal goes low, said third clock signal goes high when said second clock signal goes low, said fourth clock signal goes high when said third clock signal goes low and said first clock signal goes high when said fourth clock signal goes low.

33. (Currently Amended) An integrated circuit for performing stress testing, comprising:

a first power rail connected to a first latch and a first circuit, said first power rail powered when a first clock signal is in an (A) state ~~where A is equal to 0 or 1~~ and de-powered when said first clock signal is in a (1-A) state where A is equal to 0 or 1, said first power rail supplied from a first power supply;

a second power rail connected to a second latch, said second power rail powered when a second clock signal is in a ~~[[a]]~~ (B) state ~~where B is equal to 0 or 1~~ and de-powered when said second clock signal is in a (1-B) state, where B is equal to 0 or 1, said second power rail supplied from a second power supply;

said first circuit coupled between an output of said first latch and an input of said second latch; and

said first clock signal high whenever said second clock signal is low, said first clock signal low whenever said second clock signal is high, low states of said first clock signal not overlapping high states of said second clock signal and low states of said second clock signal not overlapping high states of said first clock signal.

34. (Currently Amended) An integrated circuit for performing stress testing, comprising:

a first power rail connected to an L1 latch of a first L1/L2 latch, to a first circuit and to an L1 latch of a second L1/L2 latch, said first power rail powered when a first clock signal is in an (A) state ~~where A is equal to 0 or 1~~ and de-powered when said first clock signal is in a (1-A) state where A is equal to 0 or 1, said first power rail supplied from a first power supply;

a second power rail connected to an L2 latch of said first L1/L2 latch and to an L2 latch of said second L1/L2 latch, said second power rail powered when a second clock signal is in a (B) state ~~where B is equal to 0 or 1~~ and de-powered when said second clock signal is in a (1-B) state where B is equal to 0 or 1, said second power rail supplied from a second power supply;  
and

said first clock signal high whenever said second clock signal is low, said first clock signal low whenever said second clock signal is high, low states of said first clock signal not overlapping high states of said second clock signal and low states of said second clock signal not overlapping high states of said first clock signal.

35. (Currently Amended) An integrated circuit for performing stress testing, comprising:

a first power rail connected to a first latch and a first circuit, said first power rail powered when a first clock signal is in an (A) state ~~where A is equal to 0 or 1~~ and de-powered when said first clock signal is in a (1-A) state where A is equal to 0 or 1, said first power rail supplied from a first power supply;

a second power rail connected to a second latch and a second circuit, said power rail powered when a second clock signal is in a (B) state ~~where B is equal to 0 or 1~~ and de-powered when said second clock signal is in a (1-B) state where B is equal to 0 or 1, said second power rail supplied from a second power supply;

a third power rail connected to a third latch and a third circuit, said third power rail powered when a third clock signal is in a (C) state ~~where C is equal to 0 or 1~~ and de-powered when said third clock signal is in a (1-C) state where C is equal to 0 or 1, said third power rail supplied from a third power supply;

a fourth power rail connected to a fourth latch and a fourth circuit, said fourth power rail powered when a fourth clock signal is in a (D) state ~~where D is equal to 0 or 1~~ and de-powered when said fourth clock signal is in a (1-D) state where D is equal to 0 or 1, said fourth power rail supplied from a fourth power supply;

said first circuit coupled between an output of said first latch and an input of said second latch, said second circuit coupled between an output of said second latch and an input of said third latch, said third circuit coupled between an output of said third latch and an input of said fourth latch and said fourth circuit coupled to an output of said fourth latch; and

either said first clock signal high whenever said second, third and fourth clocks are all low, said second clock signal high whenever said first, third and fourth clocks are all low, said third clock signal high whenever said first, second and fourth clocks are all low and said fourth clock signal high whenever said first, second and third clocks are all low or said first clock signal low whenever said second, third and fourth clocks are all high, said second clock signal low whenever said first, third and fourth clocks are all high, said third clock signal low whenever said first, second and fourth clocks are all high and said fourth clock signal low whenever said first, second and third clocks are all high, low states of said first clock signal not overlapping high states of said second clock signal and low states of said second clock signal not overlapping high states of said first clock signal.



36. (Currently Amended) A method for stress testing an integrated circuit, comprising:

providing said integrated circuit, said integrated circuit including:

a first power rail connected to a first latch and a circuit, said first power rail supplied from a first power supply; and

a second power rail connected to a second latch, said second power rail supplied from a second power supply, said circuit coupled between an output of said first latch and an input of said second latch;

powering said first power rail when a first clock signal is in an (A) state ~~where A is equal to 0 or 1~~ and dc-powering said first power rail when said first clock signal is in a (1-A) state where A is equal to 0 or 1; and

powering said second power rail when a second clock signal is in a (B) state ~~where B is equal to 0 or 1~~ and dc-powering said second power rail when said second clock signal is in a (1-B) state where B is equal to 0 or 1, said first clock signal high whenever said second clock signal is low, said first clock signal low whenever said second clock signal is high, low states of said first clock signal not overlapping high states of said second clock signal and low states of said second clock signal not overlapping high states of said first clock signal.

37. (Currently Amended) A method for stress testing an integrated circuit, comprising:

providing said integrated circuit, said integrated circuit including:

a first power rail connected to an L1 latch of a first L1/L2 latch, to a first circuit and to an L1 latch of a second L1/L2 latch, said first power rail supplied from a first power supply; and

a second power rail connected to an L2 latch of said first L1/L2 latch and to an L2 latch of said second L1/L2 latch, , said second power rail supplied from a second power supply;

powering said first power rail when a first clock signal is in an (A) state ~~where A is equal to 0 or 1~~ and de-powering said first power rail when said first clock signal is in a (1-A) state where A is equal to 0 or 1; and

powering said second power rail when a second clock signal is in a (B) state ~~where B is equal to 0 or 1~~ and de-powering said second power rail when said second clock signal is in a (1-B) state where B is equal to 0 or 1, said first clock signal high whenever said second clock signal is low, said first clock signal low whenever said second clock signal is high, low states of said first clock signal not overlapping high states of said second clock signal and low states of said second clock signal not overlapping high states of said first clock signal.

38. (Currently Amended) A method for stress testing an integrated circuit, comprising:

providing said integrated circuit, said integrated circuit comprising:

a first power rail connected to a first latch and a first circuit, , said first power rail supplied from a first power supply;

a second power rail connected to a second latch and a second circuit, said second power rail supplied from a second power supply;

a third power rail connected to a third latch and a third circuit, said third power rail supplied from a third power supply;

a fourth power rail connected to a fourth latch and a fourth circuit, said fourth power rail supplied from a fourth power supply; and

said first circuit coupled between an output of said first latch and an input of said second latch, said second circuit coupled between an output of said second latch and an input of said third latch, said third circuit coupled between an output of said third latch and an input of said fourth latch and said fourth circuit coupled to an output of said fourth latch; and

powering said first power rail when a first clock signal is in an (A) state ~~where A is equal to 0 or 1~~ and de-powering said first power rail when said first clock signal is in a (1-A) state where A is equal to 0 or 1;

powering said second power rail powered when a second clock signal is in a (B) state ~~where B is equal to 0 or 1~~ and de-powering said second power rail when said second clock signal is in a (1-B) state where B is equal to 0 or 1;

powering said third power rail powered when a third clock signal is in a (C) state ~~where C is equal to 0 or 1~~ and de-powering said third power rail when said third clock signal is in a (1-C) state where C is equal to 0 or 1;

powering said fourth power rail powered when a fourth clock signal is in a (D) state ~~where D is equal to 0 or 1~~ and de-powering said fourth power rail when said fourth clock signal is in a (1-D) state where D is equal to 0 or 1; and

either said first clock signal high whenever said second, third and fourth clocks are all low, said second clock signal high whenever said first, third and fourth clocks are all low, said third clock signal high whenever said first, second and fourth clocks are all low and said fourth clock signal high whenever said first, second and third clocks are all low or said first clock signal low whenever said second, third and fourth clocks are all high, said second clock signal low whenever said first, third and fourth clocks are all high, said third clock signal low whenever said

first, second and fourth clocks are all high and said fourth clock signal low whenever said first, second and third clocks are all high, low states of said first clock signal not overlapping high states of said second clock signal and low states of said second clock signal not overlapping high states of said first clock signal.

39. (Currently Amended) The integrated circuit of claim 33, wherein:

said first power rail is powered when said first clock signal is high and is de-powered when said first clock signal is low and said second power rail is powered when said second clock signal is high and is de-powered when said second clock signal is low; or

said first power rail is powered when said first clock signal is low and is de-powered when said first clock signal is high and said second power rail is powered when said second clock signal is low and is de-powered when said second clock signal is high.

40. (Currently Amended) The method of claim 36, wherein:

said first power rail is powered when said first clock signal is high and is de-powered when said first clock signal is low and said second power rail is powered when said second clock signal is high and is de-powered when said second clock signal is low; or

said first power rail is powered when said first clock signal is low and is de-powered when said first clock signal is high and said second power rail is powered when said second clock signal is low and is de-powered when said second clock signal is high.

41. (Currently Amended) The integrated circuit of claim 34, wherein:

said first power rail is powered when said first clock signal is high and de-powered when said first clock signal is low and said second power rail is powered when said second clock signal is high and de-powered when said second clock signal is low; or

said first power rail is powered when said first clock signal is low and is de-powered when said first clock signal is high and said second power rail is powered when said second clock signal is low and is de-powered when said second clock signal is high.

42. (Currently Amended) The method of claim 37, wherein:

said first power rail is powered when said first clock signal is high and is de-powered when said first clock signal is low and said second power rail is powered when said second clock signal is high and is de-powered when said second clock signal is low; or

said first power rail is powered when said first clock signal is low and is de-powered when said first clock signal is high and said second power rail is powered when said second clock signal is low and is de-powered when said second clock signal is high.

43. (New) The integrated circuit of claim 35, wherein:

said first power rail is powered when said first clock signal is high and is de-powered when said first clock signal is low, said second power rail is powered when said second clock signal is high and is de-powered when said second clock signal is low, said third power rail is powered when said third clock signal is high and is de-powered when said third clock signal is low, and said fourth power rail is powered when said fourth clock signal is high and is de-powered when said fourth clock signal is low; or

said first power rail is powered when said first clock signal is low and is de-powered when said first clock signal is high and said second power rail is powered when said second clock signal is low and is de-powered when said second clock signal is high, said third power rail is powered when said third clock signal is low and is de-powered when said third clock signal is high and said fourth power rail is powered when said fourth clock signal is low and is de-powered when said fourth clock signal is high.

44. (New) The method of claim 38, wherein:

said first power rail is powered when said first clock signal is high and is de-powered when said first clock signal is low, said second power rail is powered when said second clock signal is high and is de-powered when said second clock signal is low, said third power rail is powered when said third clock signal is high and is de-powered when said third clock signal is low, and said fourth power rail is powered when said fourth clock signal is high and is de-powered when said fourth clock signal is low; or

said first power rail is powered when said first clock signal is low and is de-powered when said first clock signal is high and said second power rail is powered when said second clock signal is low and is de-powered when said second clock signal is high, said third power rail is powered when said third clock signal is low and is de-powered when said third clock signal is high and said fourth power rail is powered when said fourth clock signal is low and is de-powered when said fourth clock signal is high.